

WHAT IS CLAIMED IS:

1. An information recording/reproducing apparatus for recording and playback video information, comprising:

5 means for assembling video packs, using the input source;

means for assembling a video object unit, using the video packs; and

10 means for coordinating the content of the copy control information with the content of the video scrambling control information when the video object unit is assembled.

2. The apparatus according to claim 1, wherein
an information processing data format defines an
15 audio pack having a packet, including a packet header
having audio scrambling control information, and
including audio data; and

20 said coordinating means coordinates the content of
the video scrambling control information of the video
packs with the content of the audio scrambling control
information of the audio pack.

25 3. The apparatus according to claim 2, wherein
said information processing data format defined an
sub picture pack having a packet including a packet
header having sub picture scrambling control
information and including sub picture data; and
said coordinating means coordinates the content of

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the video scrambling control information of the video packs with the content of the sub picture scrambling control information of the sub picture pack.

4. The apparatus according to claim 3, wherein
5 said coordinating means determines the contents of said copy control information in a unit control pack, using the contents of the video scrambling control information contained in the pack header of a video pack when the video pack is input as input source.

10 5. The apparatus according to claim 3, wherein
 said video scrambling control information, said audio scrambling control information and said sub picture scrambling control information are copy authorizing information or copy prohibiting information.

15 6. The apparatus according to claim 1, wherein
 said coordinating means detects copy-related information contained in said input source and determines the contents of said copy control
20 information in a unit control pack on the basis of the contents of the detected copy-related information.

25 7. The apparatus according to claim 6, wherein
 said coordinating means rearranges the contents of said copy control information and those of said video scrambling control information so as to authorize copying when the contents of the detected copy-related information authorizes copying but prohibit copying.

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when the contents of the detected copy-related information authorizes copying only once or prohibits copying.

8. The apparatus according to claim 1, wherein
5 an information processing data format defines a video object formed by assembling video object units and the attribute information on the attributes of a video object so as to make the attribute information containing copy-related information for the video
10 object; and

10 said coordinating means has:
means for making a majority decision by determining if the copy control information contained in each of the plurality of unit control packs in a
15 video object authorizes or prohibits copying; and means for determining the contents of the copy control information for the video object on the basis of the majority decision.

9. The apparatus according to claim 1, wherein
20 an information processing format further defines a video object formed by assembling video object units and the attribute information on the attributes of a video object so as to make the attribute information containing copy-related information for the video
25 object; and

said coordinating means has:
means for detecting if the copy control

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information contained in each of the plurality of unit control packs in a video object authorizes or prohibits copying; and

means for determining the contents of the copy-
related information for the video object so as to
prohibit copying if copy control information
prohibiting copying is detected.

10. The apparatus according to claim 9, wherein
said information processing data format further
defines a file formed by assembling a plurality of
video objects and the attribute information on the
attributes of a file so as to make the attribute
information containing copy-related information for the
file; and

15 when a file contains an object, said coordinating
means provides copy-related information for the file
with contents the same as those of the copy-related
information for the file containing said object.

20 11. The apparatus according to claim 9, wherein
 said information processing data format further
defines a file formed by assembling a plurality of
video objects and the attribute information on the
attributes of a file so as to make the attribute
information containing copy-related information for the

when a file contains a plurality of objects and the contents of the copy-related information for any of

said plurality of objects authorize copying, said control means provides copy-related information for the file with contents also authorizing copying.

12. The apparatus according to claim 2, wherein
5 said coordinating means includes means for scrambling video data and audio data on the basis of said video scrambling information and said audio scrambling information.

13. The apparatus according to claim 1, wherein
10 an information processing data format further defines a video object formed by assembling video object units; and

15 said apparatus further comprises means for recording video objects on a hard disk or an optical disk.

14. A method for coordinating copy control information processed by an information recording/reproducing apparatus for recording and playback video information, comprising steps of:

20 assembling video packs, using the input source;
 assembling a video object unit, using the video packs;

25 coordinating the content of the copy control information with the content of the video scrambling control information when the video object unit is assembled.

15. The method according to claim 14, wherein

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an information processing data format defines an audio pack having a packet including a packet header having audio scrambling control information and including audio data;

5 said coordinating step including step of:
 coordinating the content of the video scrambling control information of the video packs and the content of the audio scrambling control information of the audio pack in same meaning.

10 16. The method according to claim 15, wherein
 said information processing data format defines an sub picture pack having a packet including a packet header having sub picture scrambling control information and including sub picture data;

15 15. The method according to claim 14, wherein
 said coordinating step including step of:
 coordinating the content of the video scrambling control information of the video packs and the content of the sub picture scrambling control information of the sub picture pack in same meaning.

20 17. The method according to claim 16, wherein
 said coordinating step including step of:
 determining the contents of said copy control information in a unit control pack by using the contents of the video scrambling control information contained in the pack header of a video pack when the video pack is input as an input source.

25 18. The method according to claim 14, wherein

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said coordinating step including steps of:
detecting the copy-related information contained
in said input source; and

5 determining the contents of said copy control
information in a unit control pack on the basis of the
contents of the detected copy-related information.

19. The method according to claim 18, wherein
said coordinating step including step of:
rearranging the contents of said copy control
10 information and those of said video scrambling control
information, so as to authorize copying when the
contents of the detected copy-related information
authorizes copying but prohibits copying when the
contents of the detected copy-related information
15 authorizes copying only once or prohibits copying.

20. The method according to claim 14, wherein
said information processing format further defines
a video object formed by assembling video object units
and an attribute information on the attributes of a
20 video object so as to make the attribute information
containing copy-related information for the video
object;

25 said coordinating step including steps of:
making a majority decision by determining if the
copy control information contained in each of the
plurality of unit control packs in a video object
authorizes or prohibits copying; and

determining the contents of the copy-related information for the video object on the basis of the majority decision.

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